

IFSPPT International Perspective

Surveillance of Athletes' Health in Resource-Constrained African Sports Contexts: Why Context Matters and Time To Catch Up

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Athlete health surveillance is fundamental to understanding, preventing, and managing injuries, illnesses, and other health problems in sport. While standardized surveillance systems developed by organizations such as the International Olympic Committee (IOC) have substantially advanced sports medicine globally, their applicability across diverse African sporting environments remains insufficiently examined. Many existing surveillance approaches assume the availability of trained medical personnel, robust health infrastructure, standardized documentation systems, and stable sporting environments—conditions that are not readily accessible across Africa.

The continent is not homogeneous; some countries and elite sporting programs have surveillance capacities comparable to international standards, while many others operate under significant resource constraints. This commentary aims to examine the limitations of conventional athlete health surveillance approaches in African settings and to advocate for context-sensitive, African-led surveillance systems capable of generating locally relevant evidence to inform injury prevention, health policy, and athlete welfare. Leveraging collaborations among African researchers, clinicians, universities, sports federations, healthcare organizations, and international partners offers an opportunity to develop sustainable surveillance systems while strengthening research and clinical capacity across the continent.

INTRODUCTION

Athlete health surveillance is fundamental to injury prevention, athlete welfare, and evidence-informed sports policy.¹ Despite internationally standardized surveillance methods, epidemiological evidence from Africa remains limited and is largely confined to a few countries and sports. Studies in Nigerian football, West African Football Union (WAFU) tournaments, and African athletics such as the 2023 under 18 All Africa athletics competitions have advanced understanding while highlighting contextual challenges related to healthcare access, reporting practices, resources, and cultural perceptions of injury and illness.²⁻⁵ These evidence gaps underscore the need for contextually relevant athlete health surveillance systems tailored to the diverse realities of African sport.

Although injury surveillance systems had been used in sport for decades, the International Olympic Committee

(IOC) implemented a standardized injury surveillance system across all sports at the Olympic Games for the first time during the Beijing 2008 Olympic Games.⁶ Since then, standardized surveillance systems have provided critical epidemiological data informing clinical decision-making, policy development, athlete welfare strategies, and injury prevention programs.^{1,7,8} Surveillance data accumulated over successive Olympic cycles.^{6,7,9,10} have enabled the quantification of injury burden and identification of high-risk sports. Consequently, the IOC surveillance methodology and consensus recommendations have become the reference standard for athlete health surveillance in high-income settings.^{5,6} Almost two decades after the Beijing Olympics, despite representing a population of more than 1.4 billion people and experiencing rapid growth in organized sport and elite athletic participation, Africa remains largely underrepresented in athlete health surveillance research, and in research in general.^{11,12} With the

Youth Olympic Games scheduled to take place in Dakar in 2026 and the African Games scheduled in Cairo in 2027, there is a timely opportunity to strengthen contextually relevant surveillance systems that can inform athlete health policies, improve injury and illness prevention strategies, and support evidence-based sports medicine practice across the continent.

The African Games, a major continental multisport competition held every four years brings together elite athletes representing national teams from across Africa in a range of Olympic and non-Olympic sports. The 2027 African Games present a unique opportunity to strengthen athlete health surveillance in Africa while highlighting the need for surveillance frameworks that are adapted to African sporting structures, available health-system and technological resources, cultural and linguistic diversity, and the epidemiological priorities of African athletes. This commentary aims to examine the limitations of conventional athlete health surveillance approaches in African settings and to advocate for context-sensitive, African-led surveillance systems capable of generating locally relevant evidence to inform injury prevention, health policy, and athlete welfare.

WHY CURRENT APPROACHES MAY NOT FULLY FIT AFRICAN CONTEXTS

Internationally established surveillance methodologies share several structural contentions that do not translate straightforwardly to most African sporting environments. The first contention is that standard surveillance systems assume access to trained medical personnel, yet many African sports settings lack sufficient sports medicine professionals.^{4,12,13} In their absence, coaches often assume medical responsibilities, as reported related to elite Senegalese sport, potentially compromising the reliability of surveillance data.¹²

The second contention is that standard surveillance systems also assume adequate infrastructure and a culture of systematic documentation. However, limited resources, inconsistent scheduling, and poor record-keeping in many African sports settings make surveillance difficult to implement, highlighting the importance of feasibility alongside effectiveness.^{4,12,13}

Third, standard epidemiological definitions may be inappropriate in some African settings, where irregular training schedules and socioeconomic realities limit the applicability of conventional measures such as time-loss and exposure. This reinforces the need for surveillance approaches that reflect local contexts and implementation realities.^{12, 14-16}

Finally, the cultural dimension of injury reporting deserves explicit consideration. Across several African sporting contexts, injury normalization is prevalent: athletes are socialized to minimize pain and resist disclosure for fear of appearing weak or losing their place on the team. In Senegalese elite sport, stakeholders described a widespread tendency to train through pain, return to competition without medical clearance, and rely on traditional healers whose

practices fall entirely outside any biomedical surveillance framework.¹² Such practices likely result in an underestimation of the injury burden in these populations

OPPORTUNITIES FOR CONTEXT-SENSITIVE SURVEILLANCE SYSTEMS IN AFRICA

Addressing these barriers will require collaboration among coaches, sports physiotherapists, sports medicine physicians, researchers, sporting organizations, athletes, and policymakers. Capacity-building initiatives, mentorship opportunities, and international partnerships can help strengthen surveillance expertise while ensuring that African stakeholders remain central to the development of solutions.

An example of this approach is the recent collaboration between Saint Louis University (SLU), the Football Association of Zambia (FAZ), and the Sports Physiotherapy Association of Zambia (SPAZ), supported by the International Olympic Committee (IOC), to implement the SLU–IOC Health Surveillance System (HSS) in the FAZ Premier League. This initiative, together with the impending partnership between SLU and the African Union (AU), a continental intergovernmental organization comprising 55 African member states hosts and manages all Africa games and provides an important opportunity to strengthen context-sensitive athlete health surveillance, research capacity, and evidence-informed policy across Africa. These emerging unique collaborations offer a practical platform for piloting and evaluating a context-sensitive athlete health surveillance system in Africa. This work can generate Africa-specific evidence on injuries, illnesses, and mental health among athletes across different sports and competitive settings while testing implementation strategies that can be adapted and scaled up across the continent. Furthermore, this collaboration provides an opportunity to expand surveillance efforts beyond national borders through multi-country partnerships, and harmonize data collection frameworks and regional policy development. These collaborations could support the creation of a coordinated African Athlete Health Surveillance ecosystem. For example, the involvement of sports physical therapists who are members of the Sports Physiotherapy Association of Zambia (SPAZ) in the 2025/26 injury and health surveillance project within the FAZ Premier League demonstrates how professional partnerships can strengthen surveillance capacity and promote best practices in Zambia.

Collectively these partnerships can create an African-led surveillance system that generate locally relevant evidence, strengthen athlete welfare, build implementation science capacity and contribute to the establishment of a sustainable continental surveillance network

THE WAY FORWARD

Future efforts should first seek to understand the contextual needs, feasibility, and requirements for athlete health surveillance across African sports settings. Surveillance

systems should then be co-designed with key stakeholders, including athletes, coaches, team medical staff and sports physical therapists, national and continental sport's governing bodies, national Olympic committees, sports federations, researchers, and relevant ministries of health, and evaluated for feasibility, acceptability, and reliability before wider implementation. Once tested, these systems can support robust epidemiological studies to address existing evidence gaps and inform injury prevention, athlete welfare, and sports policy across Africa. Realizing this potential will depend on sustained partnerships among African researchers, clinicians, sports organizations, policymakers, and international partners, alongside organizations such as the IOC and FIFA that are well positioned to contribute technical expertise, capacity building, and sustainable investment.

At the policy level, governing bodies all across Africa should be encouraged and resourced to embed basic but structured health surveillance requirements within national sport governance frameworks. Injury reporting should not depend on the initiative of individual medical personnel, coaches, or club administrators; health surveil-

lance should be a standard component of athlete registration and competition licensing. Regional federations can play a facilitating role by providing standardized tools, training, and incentives for compliance.

CONCLUSION

Although athlete health surveillance activities are being undertaken across Africa, much of the resulting evidence remains unpublished or confined to local dissemination channels, limiting its visibility within the international literature. This reflects broader inequities in research capacity, dissemination, and support affecting low- and middle-income countries.¹⁷ Strengthening African research capacity, opportunities for publication, collaboration, and knowledge dissemination are essential to ensure that locally generated evidence contributes meaningfully to the global athlete health evidence base.

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